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Claims:

1.   A customisable data filter system adapted to reduce a dimension of a searchable data base and to perform one or more of a database search and a data item
5   selection, in relation to a correspondingly reduced search space, said system comprising:

a Portable Customisable data Filter and Interface (PCFI) comprising a programmable smartcard adapted to store at least a data filter parameter, and further adapted to provide a user interface by means of spatially distributed user selectable icons made visible on a surface of the smartcard;

10   a reader means adapted to interface with said PCFI, and further adapted to discriminate an icon selected by a user; and

database processing means adapted to interface with the reader means, said database processing means being responsive to said data filter parameter and detected icon selection; wherein said correspondingly reduced search space is defined by said filter
15   parameter, and said one or more of the database search and the data item selection is performed using the selectable icons.

2.   A customised data filter system according to claim 1, wherein said data filter parameter comprises a base filter parameter, and wherein the PCFI is adapted to
20   store another filter parameter which can be combined with said base filter parameter to thereby enable further reduction of the dimension of the searchable data base.

3.   A customisable data filter system according to claim 1, wherein said data filter parameter is a reference to said data filter parameter.

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4.   A method of customising a Portable Customisable data Filter and Interface (PCFI), said method comprising steps of:

interfacing a customising system to both said PCFI and a Portable Customisable User Interface (PCUI); and

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programming said PCFI by means of user instructions being input by means of the PCUI to said customising system.

5.   A method of customising a Portable Customisable data Filter and Interface (PCFI) comprising steps of:

interfacing a customising system to said PCFI; and

programming said PCFI by means of user instructions being input to said customising system by means of predetermined control elements on the PCFI.

6.   A Portable Customisable data Filter and Interface (PCFI) adapted to reduce a database search space, said PCFI comprising:

a programmable smartcard providing a user interface having spatially distributed user selectable icons made visible on a surface of the smartcard, wherein a selected icon is capable of discrimination by a smartcard reader to which the PCFI is connectable;

first and second data filter parameters; and

a first rule adapted to define a third data filter parameter dependent upon said first and second data filter parameters.

7.   A PCFI according to claim 6, wherein said first and second data filter parameters are first and second references to said first and second data filter parameters, and further wherein said third data filter parameter is a reference to said third data filter parameter.

8.   A PCFI according to claim 6, wherein said first rule comprises at least one of:

a boolean relationship applicable to said first and second data filter parameters; and

a learning function operable upon one or more of said first and second data filter parameters in conjunction with a baseline parameter.

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9.   A PCFI according to claim 8, wherein said first and second data filter parameters are first and second references to said first and second data filter parameters.

10.   A method of reducing a dimension of a searchable data base, and
5   performing at least one of a database search and a data item selection, in relation to a correspondingly reduced search space, said method comprising steps of:

configuring a Portable Customisable data Filter and Interface (PCFI) comprising a programmable smartcard adapted to store at least a data filter parameter, and further adapted to provide a user interface by means of spatially distributed user selectable icons
10   made visible on a surface of the smartcard;

interconnecting the PCFI to a searchable database;

selecting one or more of said user selectable icons;

defining the reduced search space dependent upon said filter parameter; and

performing at least one of a database search and a data item selection, in relation
15   to said reduced search space, dependent upon said selection.

11.   A method according to claim 10, wherein   said   defining   step comprises sub-steps of:

reading the filter parameter, being a base filter parameter, from the PCFI; and

applying the base filter parameter to the searchable database thereby to define
20   the reduced search space; and wherein the step of performing one or more of a database search and a data item selection is followed, if further search space reduction is desired, by further steps of:

reading another filter parameter from the PCFI;

25   combining said other filter parameter with said base filter parameter; and

applying the combined filter parameters to the reduced search space thereby to define a further reduced search space.
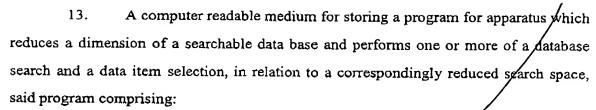
12.   A method of reducing a dimension of a searchable database according
30   to claim 10, whereby said data filter parameter is a reference to said data filter parameter.

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13.   A computer readable medium for storing a program for apparatus which reduces a dimension of a searchable data base and performs one or more of a database search and a data item selection, in relation to a correspondingly reduced search space, said program comprising:

code for a configuring step for configuring a Portable Customisable data Filter and Interface (PCFI) comprising a programmable smartcard adapted to store at least a data filter parameter, and further adapted to provide a user interface by means of spatially distributed user selectable icons made visible on a surface of the smartcard;

code for an interconnecting step for interconnecting the PCFI to a searchable database;

code for a selection step responsive to selection of one or more of said user selectable icons;

code for a defining step for defining the reduced search space dependent upon said filter parameter; and

code for a database searching step and code for a data item selection step for performing at least one of a database search and a data item selection, in relation to said reduced search space, dependent upon said selection.

14.   A computer readable medium according to claim 13, wherein said data filter parameter is a reference to said data filter parameter.